UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,692	11/17/2003	Meinrad Gotz	2347.001	5376

23405 7590 07/06/2006

HESLIN ROTHENBERG FARLEY & MESITI PC
5 COLUMBIA CIRCLE
ALBANY, NY 12203

EXAMINER	
BOOSALIS, FANI POLYZOS	
ART UNIT	PAPER NUMBER
2884	

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/714,692	GOTZ ET AL.	
	Examiner	Art Unit	
	Faye Boosalis	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *21-27,30-35,44,47,49,50 and 52* is/are allowed.

6)☒ Claim(s) *1-4,7-9, 12-14, 18-20, 28-29, 36-43, 45-46, 48, 51* is/are rejected.

7)☒ Claim(s) *5-6, 10-11, 15-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Comment on Submissions

1. This communication is responsive to submissions 30 March 2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 36-38, 40, 42-43 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by *Ignatowicz et al (US 5,653,537 A).*

Regarding claim 1, Ignatowicz discloses a sighting device for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines 14-39).

Regarding claim 2, Ignatowicz discloses the sighting device wherein the piezoactuator is a piezo-bending actuator (col. 7, lines 22-40).

Regarding claim 36, Ignatowicz discloses a radiometer, comprising: an IR detector (200) (col. 2, lines 43-44); a lens being arranged with respect to the IR detector such that the lens focuses IR radiation from the measuring surface of the detector; and a light source emitting visible light for marking the measuring surface; the marking

providing a visible indication based upon a reading of the IR detector (col. 4, lines 18-21);

Regarding claim 37, Ignatowicz disclose a deviating means in the proximity of the optical axis, is adapted to deviate the beam path of the visible light (col. 7, lines 14-39 and col. 10, lines 3-24).

Regarding claim 38, Ignatowicz disclose a deviating means for deflecting light beams encountering the deviating means at different locations about different angles (col. 7, lines 14-39 and col. 10, lines 3-24).

Regarding claim 40, Ignatowicz disclose a deviating means is formed by a mirror (See Abstract).

Regarding claim 42, Ignatowicz disclose wherein the second lens for visible light is arranged between the light source and the deviating means (col. 4, lines 18-42).

Regarding claim 43, Ignatowicz disclose wherein the lens comprises a bore where the visible light passes the lens (col. 4, lines 34-42).

Regarding claim 45, Ignatowicz disclose a method for a radiometer of visibly marking a measuring surface, comprising: emitting a visible light beam by a light source for marking the measuring surface (col. 4, lines 18-21); and controlling a direction of the light beam by means of piezoactuator (col. 7, lines 14-39).

4. Claim 51 is rejected under 35 U.S.C. 102(b) as being anticipated by *McKinley et al (EP 0867699 A2)*.

Regarding claim 51, McKinley discloses a method for a radiometer (10), comprising: focusing IR radiation emitted by a measuring surface by means of a lens on

an IR detector; determining a temperature of the measuring surface on the basis of a signal supplied by the IR detector marking the measuring surface by visible light; and indicating with the marking at least one of a measured state and a change of temperature based upon the determined temperature (col. 5, lines 10-30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* as applied to claim 1 above, and further in view of *Prekel et al (US 5,841,138 A).*

7. Regarding claim 3, Ignatowicz discloses a sighting device for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines 14-39). Ignatowicz does not specifically disclose of segmented mirrors. Ignatowicz does not disclose of segmented mirrors. Perkel discloses of a nondestructive and contact-free testing of material by means of thermal excitation of surfaces comprising a segmented mirror (22) for driving the light beam (S) by the light source into a plurality of beams (col. 4, lines 14-22). Perkel teaches the mirror (22) is formed with recesses or cuts, and it is

either rotated continually or moved back and forth in oscillating motions between two defined angular positions. The excitation beam S hitting the mirror surface is transmitted, if it happens to meet a recess, or it is deflected by reflection, all depending on the position of the mirror. In a preferred embodiment the mirror is round and segments are cut out of its circumference at regular intervals (col. 4, lines 14-22). Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to include a segmented mirror, as disclosed supra by Perkel, to allow for a more efficient means to measure temperature by a radiometer.

Regarding claim 4, Perkel discloses a nondestructive and contact-free testing of material by means of thermal excitation of surfaces comprising a mirror (70) attached to the piezoactuator (72), wherein the mirror (70) is adapted to be moved by the piezoactuator and wherein the mirror deviates the light beam to a segmented mirror (74), wherein the segmented mirror reflects the light beam to the measuring surface (col. 5, lines 45-67 and col. 6, lines 1-10).

8. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* as applied to claim 1 above, and further in view of *McKinley et al (EP 0867699 A2).*

Regarding claims 7-9, Ignatowicz discloses a sighting device for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines

14-39). Ignatowicz does not disclose the light source being attached to the actuator. McKinley discloses measuring temperature using infrared techniques comprising: a light source (112) attached to an actuator (i.e. vibratory means) so the actuator can rotate the light source (col. 7, lines 18-29). McKinley teaches the laser (112) can be rotated by vibratory means. Rotation of the laser should be at a refraction angle which corresponds to the 90% energy zone E thereby permitting the laser beam (114) to rotate about the periphery of the energy zone E to make it visible to the user of the radiometer (10) (col. 7, lines 18-29). Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to include a rotating laser assembly, as disclosed supra by McKinley, to allow for a more efficient means to measure temperature by a radiometer.

9. Claims 12 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* and Brandli et al (US 3,924,469).

Regarding claims 12 and 46, Ignatowicz discloses a method and a sighting device for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines 14-39). Ignatowicz does not disclose an actuator comprising a coil. Brandli discloses an apparatus for measuring the temperature at the surface of an object by measuring of infrared radiation emitted form the surface comprising: an actuator for controlling a direction of the light beam; the actuator comprising a coil

mounted for varying the direction of the light beam and the positioned to move the coil in response to current flow through the coil wherein the means varies the direction of the light beam (col. 3, lines 44-65). Brandli teaches the projection of the ellipse to the surface of object (4) to be measured is approximately circular, like the projection onto any plane at a right angle thereto. Therefore, shaft (3a) and the reflective plate-like member rotate, infrared radiation from the surface of the object (4) and from the wall le of the cavity (1a) will be admitted in alternation to the detector (5) via the radiation conductor (6). In lieu of rotation of the plate-like reflecting member (2) continuously in one direction, the same desired effect can be established by oscillation of the member (2) about the axis of shaft (3a) through an angle in the range between 60 degree and 180 degree between two terminal positions with the drive for shaft (3a) being accomplished through pneumatically, hydraulically or electro-magnetically actuated motor means. (3). A heating coil (7) surrounds the periphery of the compensating radiator (1) for heating the latter, its power supply being controlled by an electronic control circuit, known per se and therefore not illustrated here, which receives the output signal from the infrared detector (5) in the form of a controlling pulse (col. 3, lines 44-65 and col. 4, lines 1-18). Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to include an actuator comprising a coil, as disclosed supra by Brandli, to allow for a more versatile means to measure temperature by a radiometer.

10. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* and Brandli et al (US 3,924,469) as applied to claim 12 above, and further in view of *Perkel et al (US 5,841,138 A).*

Regarding claim 13, Ignatowicz discloses a sighting device for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines 14-39). Ignatowicz does not specifically disclose of segmented mirrors. Ignatowicz does not disclose of segmented mirrors. Perkel discloses of a nondestructive and contact-free testing of material by means of thermal excitation of surfaces comprising a segmented mirror (22) for driving the light beam (S) by the light source into a plurality of beams (col. 4, lines 14-22). Perkel teaches the mirror (22) is formed with recesses or cuts, and it is either rotated continually or moved back and forth in oscillating motions between two defined angular positions. The excitation beam S hitting the mirror surface is transmitted, if it happens to meet a recess, or it is deflected by reflection, all depending on the position of the mirror. In a preferred embodiment the mirror is round and segments are cut out of its circumference at regular intervals (col. 4, lines 14-22). Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to include a segmented mirror, as disclosed supra by Perkel, to allow for a more efficient means to measure temperature by a radiometer.

Regarding claim 14, Perkel discloses a nondestructive and contact-free testing of material by means of thermal excitation of surfaces comprising a mirror (70) attached to the piezoactuator (72), wherein the mirror (70) is adapted to be moved by the piezoactuator and wherein the mirror deviates the light beam to a segmented mirror

(74), wherein the segmented mirror reflects the light beam to the measuring surface (col. 5, lines 45-67 and col. 6, lines 1-10).

11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* and Brandli et al (US 3,924,469), as applied to claim 12 above, and further in view of *McKinley et al (EP 0867699 A2)*.

Regarding claims 17-18, Ignatowicz discloses a sighting device for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines 14-39). Ignatowicz does not disclose the light source being attached to the actuator. McKinley discloses measuring temperature using infrared techniques comprising: a light source (112) attached to an actuator (i.e. vibratory means) so the actuator can rotate the light source (col. 7, lines 18-29). McKinley teaches the laser (112) can be rotated by vibratory means. Rotation of the laser should be at a refraction angle which corresponds to the 90% energy zone E thereby permitting the laser beam (114) to rotate about the periphery of the energy zone E to make it visible to the user of the radiometer (10) (col. 7, lines 18-29). . Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to include a rotating laser assembly, as disclosed supra by McKinley, to allow for a more efficient means to measure temperature by a radiometer.

Regarding claims 19-20, McKinley discloses the sighting device wherein the light beam guides in a circular pattern (col. 8, lines 31-40) and the stepwise change of the direction of the light beam is accomplished by a sectorized mirror (col. 6, lines 42-58 and col. 7, lines 1-2).

12. Claims 28-29 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* in view of *Prekel et al (US 5,841,138 A).*

Regarding claims 28 and 48, Ignatowicz discloses a sighting device and method for a radiometer (i.e. infrared pyrometer) (col. 2, lines 43-44) for visibly marking a measuring surface (10), the temperature of which is measured by the radiometer, comprising: a light source for emitting a visible light beam marking the measuring surface (col. 4, lines 18-21); and a piezoactuator (100) for controlling a direction of the light beam (col. 7, lines 14-39). Ignatowicz does not disclose of sectorized mirror. Perkel discloses of a nondestructive and contact-free testing of material by means of thermal excitation of surfaces comprising a sectorized mirror (22) upon which the light beam falls; the mirror causing a stepwise change of direction of light into a plurality of beams (col. 4, lines 14-22). Perkel teaches the mirror (22) is formed with recesses or cuts, and it is either rotated continually or moved back and forth in oscillating motions between two defined angular positions. The excitation beam S hitting the mirror surface is transmitted, if it happens to meet a recess, or it is deflected by reflection, all depending on the position of the mirror. In a preferred embodiment the mirror is round and segments are cut out of its circumference at regular intervals (col. 4, lines 14-22). Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to

include a sectorized mirror, as disclosed supra by Perkel, to allow for a more efficient means to measure temperature by a radiometer.

Regarding claim 29, although Prekel does not disclose the sectorized mirror comprising three concave sectors, Prekel does disclose the sighting device comprises mirrors (28)(30) as well as lenses (42)(44) and the lenses may also be concave mirrors.

13. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* as applied to claim 37 above, and further in view of *McKinley et al (EP 0867699 A2)*.

Regarding claim 39, Ignatowicz disclose a deviating means in the proximity of the optical axis, is adapted to deviate the beam path of the visible light (col. 7, lines 14-39 and col. 10, lines 3-24). Ignatowicz does not disclose the deviating means comprising a prism. McKinley discloses measuring temperature using infrared techniques wherein the deviating means comprises a prism (col. 6, lines 56-57). McKinley teaches a prism can be used in place of the mirror with predetermined angles to cause the prism to function as the reflecting mirror surface and thereby direct the laser beam about the perimeter of the energy zone (col. 6, lines 56-58 and col. 7, lines 1-2). Therefore, it would have been obvious to modify the device disclosed by Ignatowicz, to include a prism, as disclosed supra by McKinley, to allow for a more versatile radiometer.

14. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Ignatowicz et al (US 5,653,537 A)* as applied to claim 37 above, and further in view of *Hollander et al (US 6,377,400 B1)*.

Regarding claim 41, Ignatowicz disclose a deviating means in the proximity of the optical axis, is adapted to deviate the beam path of the visible light (col. 7, lines 14-39 and col. 10, lines 3-24). Ignatowicz does not disclose the deviating means comprising a hole about the optical axis. Hollander discloses modification of a laser beam wherein a deviating means comprises a hole (115) about optical axis through which IR radiation can fall upon detector (122) (See Generally Figs. 14 and 15 and col. 9, lines 3-8). Hollander teaches laser beam production unit is disposed so as a single central beam through a hole (155) wherein the detector (122), lens (121) and opening (114) are in axial alignment (col. 9, lines 4-8). Therefore, it would have been obvious to modify the device suggested by Ignatowicz, to include a deviating means comprising a hole, as disclosed supra by Hollander, to allow for a more efficiently aligned sighting device.

Allowable Subject Matter

15. Claims 21-27, 30-35, 44, 47, 49, 50 and 52 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding independent claims 21 and 47, the prior art does not disclose or fairly suggest a method or sighting device for a radiometer for visibly marking a measuring surface a temperature of which is measured by the radiometer, comprising at least three light sources, wherein, at most, two light sources are controlled to simultaneously generate points at an edge of measuring the surface.

The examiner notes that while it is known in the art for a radiometer to comprise: a laser with at least two components (312A) and (312B) which produce at least two

individual laser beams (314A) and (314B) about the detector (316). These at least two individual beams (314A) and (314B) are directed to the surface (320) being measured at the perimeter of the energy zone E rather than at its center. Through the use of a number of such laser beams, the energy zone E becomes clearly identified rather than merely the center of the energy zone E. If desired, individual lasers can be used or laser splitting devices can be used to split a single laser beam (see for example Hollander et al – US 5,368,392 A – Fig. 5 and col. 6, lines 41-51), the prior art does not fairly suggest simultaneously controlling at most two of at least three light sources to generate a plurality of points at an edge of the measuring surface.

Regarding independent claim 30, the prior art does not disclose or fairly suggest a sighting device for a radiometer for visibly marking a measuring surface, the temperature of which is measured by the radiometer, comprising: individual receptacle having a hollow space being larger than the outer dimensions of the housing of the light source and receiving the housing of the light source wherein fixation fixing the housing of the light source in the hollow space; the fixation being formed such that an optical axis of the light source extends parallel to a mechanical axis of the individual receptacle.

The examiner notes that while it is known in the art for a radiometer for adjusting a light source for visibly marking a measuring surface, comprising: introducing each light source of a plurality of light sources into an individual receptacle and assembling the light sources together with the receptacles into a sighting device (see for example *Salmon et al. - US 2004/0079870 A1* – paragraph [0249]), the prior art does not fairly

suggest a housing of light sources introduced into an individual receptacle and fixing the housing of the light sources within each individual receptacle.

Regarding independent claims 33 and 50, the prior art does not disclose or fairly suggest a method or sighting device for a radiometer for visibly marking a measuring surface a temperature of which is measured by the radiometer, comprising a plurality of light sources and a plurality of individual receptacles wherein one individual receptacle fixedly receiving each light source, wherein the optical axis of each light source is aligned parallel to the mechanical axis of the corresponding individual receptacle.

The examiner notes that while it is known in the art for a radiometer to comprise: a laser with at least two components (312A) and (312B) which produce at least two individual laser beams (314A) and (314B) about the detector (316). These at least two individual beams (314A) and (314B) are directed to the surface (320) being measured at the perimeter of the energy zone E rather than at its center. Through the use of a number of such laser beams, the energy zone E becomes clearly identified rather than merely the center of the energy zone E. If desired, individual lasers can be used or laser splitting devices can be used to split a single laser beam (see for example Hollander et al – US 5,368,392 A – Fig. 5 and col. 6, lines 41-51), the prior art does not fairly suggest simultaneously controlling at most two of at least three light sources to generate a plurality of points at an edge of the measuring surface.

Regarding independent claims 44 and 52, the prior art does not disclose or fairly suggest a method or radiometer device wherein the lens being inclined versus the optical axis so that the first reflected portion of the IR radiation encountering an outer

side of the lens is smaller than a second reflected portion of the light of the light source encountering the outer side of the lens.

The examiner notes that while it is known in the art for a radiometer to comprise an IR detector (200) (col. 2, lines 43-44); a lens being arranged with respect to the IR detector such that the lens focuses IR radiation from the measuring surface of the detector; and a light source emitting visible light for marking the measuring surface; the marking providing a visible indication based upon a reading of the IR detector (col. 4, lines 18-21), the prior art does not fairly suggest a lens arrangement with respect to the IR detector wherein the outer side of the lens is smaller than a second reflected portion of light of the light source encountering the outer side of the lens.

Regarding independent claim 49, the prior art does not disclose or fairly suggest a method for a radiometer for adjusting a light source for visibly marking a measuring surface, comprising introducing a housing of a light source into an individual receptacle by fixing the housing of the light source within each individual receptacle.

The examiner notes that while it is known in the art for a radiometer for adjusting a light source for visibly marking a measuring surface, comprising: introducing each light source of a plurality of light sources into an individual receptacle and assembling the light sources together with the receptacles into a sighting device (see for example *Salmon et al. - US 2004/0079870 A1* – paragraph [0249]), the prior art does not fairly suggest a housing of light sources introduced into an individual receptacle and fixing the housing of the light sources within each individual receptacle.

The remaining claims 22-27 and 31-32 and 34-35 are allowable based on their dependency.

16. Claims 5-6, 10-11,15-16 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding dependent claim 5, the prior art, as stated supra, does not disclose or fairly suggest of a sighting device for a radiometer wherein the segmented mirror comprises central segments and outer segments, wherein the central segments of the segmented mirror are larger than the outer segments.

Regarding dependent claim 6, the prior art, as stated supra, does not disclose or fairly suggest of a sighting device comprising of two actuators (X-Actuator and a Y-Actuator) for controlling the direction of the light beam in two dimensions on the measuring surface.

Regarding dependent claims 10-11, the prior art, as stated supra, does not disclose or fairly suggest of a sighting device wherein the piezoactuator comprises at least one metallized part; the light beam falling upon the metallized part of the piezoactuator wherein the piezoactuator changes the direction of the light beam in response to a voltage applied to the piezoactuator.

Regarding dependent claim 15, the prior art, as stated supra, does not disclose or fairly suggest of a sighting device wherein segmented mirror comprises central segments and outer segments wherein central segments of segmented mirror are larger than the outer segments.

Regarding dependent claim 16, the prior art, as stated supra, does not disclose or fairly suggest of a sighting device wherein the actuator comprises an X-actuator and a Y-actuator for controlling a position of light beam in two dimensions on the measuring surface.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Boosalis whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FB

OTILIA GABOR
PRIMARY EXAMINER